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An overview of relative clauses in Gavar

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Abstract

The goal of this paper is to give a typological overview of the main characteristics of restrictive relative clauses in Gavar. The analysis is based on 572 examples of relative clauses taken from a corpus of 59 interlinearised texts, elicited examples and example sentence provided for lexical items. It is observed that relative clauses in Gavar are externally headed, with the head noun, when present, preceding the relative clause. Headless relative clauses are also possible. The relative clause begins with a relative marker. Subject relative clauses are marked with the relative marker ma whose tone varies between high and low. Non-subject relative clauses are marked with relative marker ndá (ná) which always carries a high tone. There is no restriction on the grammatical roles that can be relativised. Subject, direct and indirect object, oblique, genitive and object of comparison relative clauses are all possible. The gap strategy is used to encode NP_{rel} within a subject relative clause. A resumptive pronoun is frequently but not always used to encode NP_{rel} within a non-subject relative clause. Gavar does not have special 'relative' tense/aspect marking, but perfective marking on the verb is disallowed in relative clauses. The existential status of the head noun is coded by the use versus the absence of a post-relative demonstrative. Subject relative clauses with an adjectival predicate form the basis of the comparative construction in Gavar. Non-subject relative clause constructions have developed into various types of adverbial clauses.

Keywords: relative clause, Chadic language, adverbial clause, comparative construction

1 Introduction

This introduction contains a brief outline of the background of the Gavar language and previous linguistic research done on the language (Section 1.1). The methodology used is described in Section 1.2, and Section 1.3 provides an outline of the rest of the paper.

1.1 Language background

Gavar is a Central Chadic language spoken by an estimated population of 15,000. The Gavar homeland is located in the subdivision of Mogode, division of Mayo-Tsanaga, in the Far North Region of Cameroon. Sizable populations of ethnic Gavar can be found in the Hina subdivision to the south, Garoua (the capital of the North Region), and across the border in Nigeria.

The classification of this language as reported in the *Ethnologue* (Eberhard, Simons & Fennig 2024) is Afro-Asiatic, Chadic, Biu-Mandara, A, A.7. According to Gravina's (2014: 26) revised internal classification of Chadic Biu-Mandara, Gavar belongs to the South subbranch, the Daba Group and the Buwal subgroup. The Biu-Mandara branch of Chadic is referred to by some authors as Central (Gravina 2014: 8).

A limited number of linguistic studies covering the phonology and some aspects of the grammar have been done on the Gavar language (Noukeu 2004; Tchikoua 2006; Viljoen 2017a; Viljoen 2019; Viljoen 2022).

1.2 Methodology

The current study was undertaken based on data collected in the Gavar language area and with a speaker in the capital city of Yaounde, in the period of 2006–2018, by both the author and a colleague, Jolanda Walhout, as part of their work with the Gavar community under the auspices of SIL Cameroon, a branch of SIL International. They were privately funded and have no conflicts of interest. The textual data was provided by numerous members of the Gavar community. Particular acknowledgment, however, goes to Ngama Paul and Kodji Emmanuel of Kwitakwa and Kodji Glab Athanas of Melehleh who also assisted with the transcription and annotation of the textual data as well as providing much of the elicited data.

The analysis of relative clauses is based on 572 examples found in a corpus created by the author, containing the data collected as described above. The corpus consists of 59 interlinearised texts of various lengths and genres (narrative, expository, procedural and hortatory), numerous elicited examples, and illustrative example sentences provided for lexical items. All of this data has been transcribed and annotated in FieldWorks Language Explorer (FLEx) (database not

yet publicly available). Language examples throughout this paper are transcribed phonemically. Tone is not marked on the verb as verbs in Gavar are underlyingly toneless (Viljoen 2019: 258). Tone marking is also omitted from certain borrowings from other languages such as French proper nouns.

1.3 Outline of paper

This paper provides a descriptive overview of restrictive relative clauses in Gavar. Section 2 gives a brief morphosyntactic profile of Gavar which will assist in interpreting the Gavar language examples provided. Section 3 examines how relative clauses can be categorised according to various typological parameters. Section 4 outlines the various types of adverbial clauses in Gavar which have developed from the relative clause structure. Comparative clauses also based on the relative clause structure are described in Section 5. A conclusion will be given in Section 6.

2 Morphosyntactic profile of Gavar

The basic constituent order of Gavar active verbal clauses is SVO/SV. This order may vary under certain pragmatic conditions. Copula clauses may either be verbal or non-verbal and have the following structure: subject (COP) predicate. Copula clauses with no copula are used with equational predicate nominals and predicate adjectives. The focus copula ànà is restricted to equational predicate nominals. It shifts the focus to the subject of the copula clause and forms the basis of pseudo-cleft constructions (Viljoen 2017a: 155–159). The copulative verb da 'to be' is used with non-equational predicate nominals such as proper inclusion, characterisation and specification. It can also be used with predicate adjectives and prepositional phrases expressing location and possession. The verb ndza 'to sit/stay' can also function as a copula for locative and possessive copula clauses.

Nominal morphology is limited to a plural suffix on a small set of animate nouns and genitive marking on kinship nouns. Verb morphology is far more complex and includes person/number marking, tense-aspect-mode (TAM) marking and other derivational extensions (Viljoen 2019). Like other languages in the area, Gavar has sentence-final negation particles and interrogative words. There is also a negative auxiliary $nk^{w}\partial l\dot{a}$ which may precede the main verb. Bipartite

negation involving both the negative auxiliary and a sentence-final negation particle is possible, but rare. Gavar is a tonal language, with high- and low-level tones but as for many Chadic languages, the lexical load is small. Verbs are underlyingly toneless. There is some grammatical variation in tone and any such tonal changes related to relative clauses will be described below.

3 The typology of Gavar relative clauses

The analysis of relative clauses in Gavar is based on a number of typological parameters which are outlined below.

A relative clause can be simply defined as "[a] type of clause, most often a subordinate clause, which serves to modify a noun phrase" (Trask 1993: 238). A more detailed definition is given by Andrews (2007: 206): "A relative clause is a subordinate clause which delimits the reference of an NP by specifying the role of the referent of that NP in the situation described by the RC.1"

Andrew's definition applies in particular to restrictive relative clauses which identify the referent of an NP by restricting the possible set of referents to a subset that the speaker wants to talk about (Trask 1993: 238; Tallerman 2015: 276). It is also possible to have non-restrictive relative clauses which "merely adds further information about the NP, without being required for identification" (Trask 1993: 238).

The vast majority of relative clauses found in the Gavar corpus are restrictive and therefore the analysis presented here will concern these. Only one example of a possible non-restrictive relative clause was found in the Gavar corpus (1). This has the same structure as restrictive relative clauses, although there appears to be a pause after the head noun which is not present in restrictive relative clauses.

(1) gwàjgwàjà gàwlà, mà ká-pew á xàjàk festival Gula REL.SBJ IPFV-happen LOC land gàvàr Gavar

"...the festival of Gula, which is happening in the land of Gavar"

¹ NP = noun phrase, RC = relative clause

Relative clauses may or may not be embedded in the main clause. When they are embedded, the relative clause and the head noun form a complex NP that then occupies a standard NP position in the main clause (Tallerman 2015: 280). Non-embedded relative clauses occur separately from the head noun and may be adjoined to the left or right of the main clause (Andrews 2007: 2014–2015). All the examples in the Gavar corpus are of embedded relative clauses. At this point, it is unknown whether adjoined relative clauses are possible.

Relative clauses have the following parts (Payne 1997: 325–326):

- 1. The head noun the NP modified by the relative clause
- 2. The restricting clause the relative clause itself
- 3. The relativised noun phrase (NP_{rel}) the element within the relative clause that is coreferential with the head noun
- 4. The relative marker the morpheme or particle that marks the restricting clause as being a relative clause

Note that a relative pronoun is a relative marker that reflects properties of NP_{rol}, for example its grammatical role.

Relative clauses can be categorised according to a number of typological parameters (Payne 1997: 326; Andrews 2007: 207; Tallerman 2015: 279–283):

- 1. The order of the relative clause and the head noun.
- 2. The presence or absence of a relative marker.
- 3. The strategy used to express NP_{rel} within the relative clause.
- 4. Which grammatical relations can be relativised.

With regard to the grammatical relations which can be relativised in a language, reference is often made in the literature to "the accessibility hierarchy", an example of which is given in Fig. 1 below. The idea is that in a particular language, if the NP_{rel} can bear one of the functions in the hierarchy, it can also bear all the functions to the left.

Figure 1: Accessibility hierarchy of grammatical relations of NP_{rel} (Keenan & Comrie 1977: 66)

Another important typological parameter for the analysis of relative clauses, not mentioned above, is tense/aspect marking. Chadic languages frequently have verb forms in relative clauses which are different from verb forms in indicative simple sentences. These 'relative'

forms may also appear in other types of embedded clauses (Frajzyngier 1996: 454–455; Zima 1991).

Frajzyngier (1996: 421–422) also notes that Chadic languages generally encode what he calls the 'existential status' of the head noun, meaning that its existence either has or had not been previously established. This roughly corresponds with the definiteness/indefiniteness distinction. He hypothesises that this distinction in Chadic languages is encoded by one of three possibilities:

- 1. Contrast between two relative markers
- 2. The use versus the absence of post-relative markers
- 3. The use versus the non-use of a relative marker

Other structures that often resemble relative clauses cross-linguistically are questions, adverbial clauses and comparatives (Thompson et al 2007: 246–247, 249–250; Andrews 2007: 207). In Gavar relative clauses form the basis of certain adverbal clauses as well as comparative constructions.

What follows is a categorisation of Gavar relative clauses according to typological parameters outlined above. The order of the relative clause and the head noun is described in Section 3.1. The nature of the relative marker is explored in Section 3.2. Section 3.3 addresses the strategies used to express the relativised noun phrase within the relative clause while Section 3.4 outlines which grammatical relations can be relativised. The tense/aspect marking of verbs within relative clauses is addressed in Section 3.5. Section 3.6 examines the question of how Gavar encodes the existential status of the head noun.

3.1 The order of the relative clause and the head noun

Like most VO languages (Payne 1997: 326), all Gavar relative clauses follow the head noun (HN), when present, as seen in examples (2a) and (2b) below. The head noun is external to the relative clause.

(2)a. [$sk \partial n$]HN [$m \dot{a}$ $mbla - x \dot{a}$ \dot{a} $l \dot{a} l \dot{a} \dot{b} x^w$]RC $t \dot{a} - mt f a$ thing REL.SBJ catch-VNT LOC hunt PFV-die

 $t \hat{a}$.

3sg.poss

'The animal which was caught at the hunt died.'

b. $[r\partial k^w \partial ts]$ HN $[nd\delta s \dot{a}$ -tsa- \dot{a}]RC $w\dot{a}ts\dot{a}$ garment REL.NSBJ 1SG.SBJ-put-3SG.DOBJ DEM.PROX $tf\dot{a}p$ $\dot{a}b\dot{a}$ $r\dot{a}$. cover.entirely with arm 'This garment that I put on has long sleeves.'

The same order of head followed by relative clause is found in nearby Chadic languages such as Buwal (Viljoen 2013: 553–554), Mina (Frajzyngier & Johnston 2005: 429), Daba (Lienhard & Giger 1976: 15), Mofu-Gudur (Hollingsworth 2004: 42) and Cuvok (Dadak 2021: 181).

Headless relative clauses (called 'free' by Andrews (2007: 208)) are also common in Gavar. In such clauses, the head noun is absent and the relative clause refers directly to the referent in question. In Gavar, headless relative clauses can occur in either the subject (3a) or the predicate position (3b) in copula clauses. Note that (3b) is an example of a pseudo-cleft construction based on a copula clause containing the focus copula $\grave{a}n\grave{a}$ as described in Section 2.

- (3)a. [mà bin-xà àká à:gí]RC blèk* wàm

 REL.SBJ be.left-VNT IMM PL thousand ten

 áxà nfád.

 over four

 'There were fourteen thousand left.' (lit. 'Those who were left were fourteen thousand.')
- b. ngàlèlèm ànà [ndá wàlà gravel COP REL.NSBJ woman

² As is common in many Chadic languages, for some intransitive clauses the verb is followed by an intransitive copy pronoun (ICP) which agrees with the subject, and in the case of Gavar, has the same form as the possessive adjective (Viljoen 2017b: 52–54).

 \dot{a} - \dot{z} \dot{z} \dot{z} \dot{z} \dot{z} \dot{z} \dot{z} \dot{z} \dot{z}

3SG.SBJ-sweep-VNT-TRANS LOC hut

'It is gravel that the woman sweeps from the hut.' (lit. 'Gravel is that which the woman sweeps from the hut.')

Headless relative clauses are also possible in neighbouring languages (Viljoen 2013: 553–554; Frajzyngier & Johnston 2005: 431; Lienhard & Giger 1976: 15).

Since Gavar has sentence-final question words, the headless subject relative clause forms the basis of questions about the subject as in examples (4a) and (4b). In this structure, the relative clause becomes the subject of a copula clause, and the interrogative word the predicate. This same structure can be observed in the closely related language of Buwal (Viljoen 2013: 504–505).

- (4)a. [mà vəla-zà-àkà gwàblà tà]RC vàjè?

 REL.SBJ give-TRANS-1SG.IOBJ hide 3SG.POSS who

 'Who (will) give me its hide?' (lit. 'The one who (will) give me its hide is who?')
- b. [mà dal-àtànà]RC vémé?

 REL.SBJ do-3PL.IOBJ what

 'What happened to them?' (lit. 'That which happened to them is what?')

In active verbal clauses, headless relative clauses can function as subject (5a), direct object (5b) and indirect object (5c).

- (5)a. [mà ká-2^wən dʒàk,]RC tà-hà.

 REL.SBJ IPFV-build house arrive-VNT

 'The one who is building the house has arrived.'
- b. à-gam [má ká-dal pìw.]RC 3SG.SBJ-drive.away REL.SBJ IPFV-do disorder 'He drives away the one who is creating disorder.'
- c. sà-tá-vəla-àtànà dàlà á [má ká-dal 1SG.SBJ-PFV-give-3PL.IOBJ money LOC REL.SBJ IPFV-do

gàn à:gí.]RC work PL

'I gave money to those doing work.'

3.2 The relative marker in Gavar

Relative clauses in Gavar are marked with a relative marker which follows the head noun (where present) and begins the relative clause. In fact, the relative marker could be better termed a relative pronoun since it carries some information about the grammatical role of the NP within the relative clause. In this regard, Gavar distinguishes between subject and non-subject. A distinction between subject and non-subject in Gavar can also be seen in terms of person/number markers attached to the verb, subject markers being prefixed and other grammatical roles (direct object, indirect object, comitative) being suffixed to the verb (Viljoen 2019: 260–263).

It is not unusual for Central Chadic languages to encode the role of the head noun through a distinction in the form of the relative marker (Frajzyngier 1996: 437). In fact, a distinction between subject and non-subject is also seen in nearby languages such as Daba (Lienhard & Giger 1976: 15), Cuvok (Dadak 2021: 179) and Mofu-Gudur (Hollingsworth 2004: 42–44).

The subject relative marker in Gavar has the form ma. This is likely to have developed from the common m- nominalising prefix found in Chadic and in Afro-asiatic languages in general (Greenberg 1966: 48). The prefix ma- is also used in the formation of agent and patient nominalisations in Gavar (6) (see also Viljoen 2017b: 46–49).

- (6)a. **mà**-?^wón dʒàk, tà-hà.

 NMLZ-build house arrive-VNT

 'The builder has arrived.'
- b. $m\acute{a}$ - $b\acute{a}$ ly \grave{a} : $g\acute{i}$ $x\grave{i}$ NMLZ-exterminate-NMLZ.PAT-exterminate PL person $m\acute{a}$ $d\grave{a}$ gn \grave{a} k bl \grave{a} k w nf \grave{a} d \acute{a} b \grave{a} REL.SBJ black thousand four with

rà-nʃilíd áxà dzánfád. hand-seven over nine

'Four thousand and seventy-nine people were killed.' (lit. 'The ones killed were four thousand and seventy-nine.')

The similarity of the nominaliser and relative marker forms has also been noted for other Chadic languages such as Miya (Schuh 1998: 260–276), Buwal (Viljoen 2013: 298), Mofu-Gudur (Hollingsworth 2004: 43), Cuvok (Dadak 2021: 180) and Mina (Frajzyngier & Johnston 2005: 38–39, 429).

The tone on the Gavar subject relative marker ma varies according to its position in the clause, the tone on the preceding word and the word class of the word that follows it. This variation is somewhat unexpected as the tone on the relative marker in certain closely related languages appears to be stable, being always high in Buwal (Viljoen 2013: 298), and low in Mina (Frajzyngier & Johnston 2005: 429). However, examples of relative clauses given for Daba (Lienhard & Giger 1976: 15) show a variation between low and high on the relative marker ma. No explanation for this variation is given. From the examples, it seems that the tone on ma is high when preceded and followed by a high tone, and low when preceded and followed by a low tone.

Table 1 below gives a summary of the tonal variations observed on the relative marker *ma* for Gavar and where they occur. Examples follow below.

Low	mà PREP		
	[low tone word] <i>mà</i> VERB		
	[no Head Noun] mà VERB (subject position)		
High	má ADJ		
	má NUM		
	[high tone word] <i>má</i> VERB		
	[no Head Noun] má VERB (non-subject position)		

Table 1: Summary of tonal variations of the subject relative pronoun ma

a) For non-verbal relative clauses, the word class of the following word determines the tone on ma. Preceding a preposition such as átá 'on', in example (7) below, the relative marker carries a low tone mà.

átá ánkìn]RC (7)límlím [**mà** dew REL.SBJ on peanut 'the dew which is on the peanut plant'

Whereas preceding an adjective or numeral such as dàgnàk 'black' in example (8a) and ntád 'one' in example (8b), the tone is high.

- dàgnàk]RC tá-skəm-ájá. (8)a. $r \ge k^w \ge ts$ [má garment REL.SBJ black PFV-buv-PTCP 'The garment which is black has been bought.'
- átá là b. xàiì-ká-dəm [**má** ntád.1RC 1INCL.SBJ-IPFV-sort on place REL.SBJ 'We have sorted together.' (lit. 'We have sorted in the one place.')
- b) For verbal relative clauses, the tone on the final syllable of the preceding word spreads onto the relative marker ma, so that if the preceding tone is low as on àlà 'someone' in example (9a) below, the tone on mà is low. If the preceding tone is high as on mává 'beer', the tone on má is high. This is similar to what was observed for Daba, as mentioned above.
- (9)a. àlà ſmà dza àlà1RC tà-ſi tà. someone REL.SBJ kill someone PFV-flee 3SG.POSS 'The person who killed someone has fled.'
- b. mává Гтá tà]RC qəi wàtsà beer REL.SBJ spoil 3sg.poss **DEM.DIST** tá-sa-ájá. PFV-drink-PCPT
 - 'That beer which is spoilt has been drunk.'
- c) For headless verbal relative clauses, its position in the clause determines the tone of the relative marker. If the headless RC is in subject position, as in examples (10a) below and (5a) above, mà carries a low tone. The tone is also low when the RC is in the predicate position following the focus copula ànà (10b).

- (10)a. [mà nda-xà]RC vàjà?

 REL.SBJ go-VNT who

 'Who comes?' (lit. 'The one who comes is who?')
- b. $x \partial dz$ gb dk an a $[ma nd \partial v.]$ RC person two COP REL.SBJ fall 'It was two people who fell.'

If the headless relative clause is in a predicate position with no copula preceding, as in example (11) below, or another non-subject position such as direct object (5b) or indirect object (5c), the relative marker $m\acute{a}$ carries a high tone.

(11) là-táŋgʷál gèŋ [má ká-ndrim-ì
NMLZ.ACT-roll boulder REL.SBJ IPFV-hurt-3SG.DOBJ
á dàbà.]RC
LOC back
'Rolling the boulder is what hurt him in the back.'

The non-subject relative marker has the form $nd\delta$ (free variant $n\delta$) and is used with all other grammatical relations apart from the subject. Unlike the tone on the subject relative marker, the tone on the non-subject pronoun is stable, always being high (12a–b). Furthermore, the tone on a following singular subject marker on the verb is also high, as in $s\delta$ - 1SG.SBJ in example (12a) and $x^w\delta$ - 2SG.SBJ in example (12b). In main indicative clauses the tone on corresponding singular subject markers is low, as in $s\delta$ - 1SG.SBJ in example (13a) and $x^w\delta$ - 2SG.SBJ in example (13b) (Viljoen 2019: 263).

- (12)a. $r \partial k^w \partial ts$ [$nd \dot{o}$ $s \dot{a}$ -tsa- ∂]RC $b \partial z m \partial k$ garment REL.NSBJ 1SG.SBJ-put-3SG.DOBJ dark $ik^w \dot{a}$. like.this 'The garment that I wear is dark.'
- b. bik [$nd\acute{o}$ $x^w\acute{a}$ - $k\acute{a}$ -ntir $\acute{a}b\grave{o}$ $f\grave{a}$]RC pen REL.NSBJ 2SG.SBJ-IPFV-write with 3SG 'the pen that you write with'

- (13)a. sà-skəm-bà nx^wà. 1SG.SBJ-buy-REFL.IOBJ goat 'I buy myself a goat.'
- 3.3 The strategy used to express NP_{rel}

The strategy used to express the NP_{rel} within the relative clause varies according to the grammatical role of the noun being relativised.

For subjects we see a combination of strategies being used. As was seen in the in previous section (3.2), a subject NP_{rel} is encoded with the subject relative pronoun ma within the relative clause. However, Gavar is a language with subject cross-referencing on the verb, even when an overt subject NP is present (14).

(14) wálí à:-sa jàká dàgàlà átá
women 3PL.SBJ-drink suffering a.lot on
là-mbśw.

NMLZ.ACT-give.birth
'Women suffer a lot while giving birth.'

With regard to this subject agreement marking, a gap strategy is used, the expected prefix being omitted in subject relative clauses (15 a– b). The gap strategy is used regardless of the tense/aspect marking on the verb (see Section 3.5).

- (15)a. sà-gas wálí [má ká-ŋtir skàn
 1SG.SBJ-look.for women REL.SBJ IPFV-write thing
 à:gí.]RC
 PL
 'I am looking for women who write things.'
- b. $\int \hat{a} \quad \hat{a}n\hat{a} \quad [m\hat{a} \quad k\hat{a}-\hat{a}:-nda.]$ RC

 3SG COP REL.SBJ IPFV-FUT-go

 'It is he who will be going.'

For non-subjects, a common strategy is that of pronoun retention (Payne 1997: 331) or the resumptive strategy (Tallerman 2015: 282),

where a resumptive pronoun appears in the relativised position. However, in some cases a gap strategy is also possible (examples given below). For the direct object and indirect object, the resumptive pronoun takes the form of a verbal suffix, as in $-\partial$ 3SG.DOBJ in example (16a), and $-\partial n\partial$ 3SG.IOBJ in example (16b).

- (16)a. $ts\acute{a}k^{w}\grave{a}$ $\grave{a}n\grave{a}$ \not{b} [$nd\acute{a}$ $hw\acute{a}-k\acute{a}-d\grave{a}l-\grave{a}$.]RC here COP work REL.NSBJ 2SG.SBJ-IPFV-do-3SG.DOBJ 'Here is the work that you are doing (it).'
- b. wàzí ànà [ndá sá-?\danha]3
 children COP REL.NSBJ 1SG.SBJ-heat-3SG.IOBJ
 wiri.]RC
 sauce

'It is the children for whom I heat the sauce.' (lit. 'It is for the children that I heat sauce (for them).')

While the verbs in the vast majority of direct object relative clauses in the data set carry a resumptive pronominal marker suffixed on the verb, there are a few examples, where it is omitted (17). It is unclear at this point whether this variation is free or conditioned in some way.

(17) sà-tá-ŋga nk wáb átá skèn [ndé 1SG.SBJ-PFV-break brain on thing REL.NSBJ sá-ká-dal gámák.]RC 1SG.SBJ-IPFV-do bad 'I took account of the bad things I do.'

For some obliques the resumptive pronoun takes the form of an independent pronoun functioning as the object of a preposition, as in example (18a), where the pronoun $\int \hat{a} 3SG$ is the object of the preposition $\hat{a}b\hat{a}$ 'with'. In other cases, the pronoun is incorporated within the preposition, as in \hat{a} \hat{x} \hat{e} $\hat{d}\hat{e}$ 'on it' in (18b).

(18)a. ántsi [ndó sá-ká-nda **ábò** sà]RC shoe REL.NSBJ 1SG.SBJ-IPFV-go with 3SG 'The shoe that I am walking with (it).'

³ Note that frequently in natural speech the third person singular indirect object agreement marker is used when referring to a plural indirect object.

b. ji \acute{a} -ji $nk \grave{\partial} \acute{a} \emph{\eta}$ $[nd \acute{a}$ \acute{a} - $k \acute{a}$ -tsa take 3SG.SBJ-take stone REL.NSBJ 3SG.SBJ-IPFV-put $x \grave{a}$ $t \emph{\partial}$ \acute{a} $x \acute{e} d \acute{e}$. 4]RC head 3SG.POSS LOC on.it

'He took the stone that he was laying his head on (it).'

It is possible, however, for the gap strategy to be used for temporal and locative oblique relative clauses, as in examples (19a) and (19b) below where the time and location are not encoded within the relative clause.

- (19)a. ntrà [ndá ní-ká-dʒi xà tʃînì]RC month REL.SBJ 1EXCL-IPFV-take head 1EXCL.POSS 'the month that we are marrying each other' (lit. 'the month that we are taking our head(s)')
- b. $v\acute{a}\eta^5$ \acute{a} - $va\eta$ $t\grave{b}$ $\acute{a}t\acute{a}$ $l\grave{a}$ $[nd\acute{b}$ arrive 3SG.SBJ-arrive 3SG.POSS on place REL.NSBJ \acute{a} -wan.]RC 3SG.SBJ-sleep

'He arrived at the place where he slept.'

A relativised possessor is encoded by a possessive adjective following the possessed noun within the relative clause, as in $t \ge 3$ SG.POSS which follows $nx^w \ge 6$ (goat' in example (20) below.

(20) àlà [ndá nx^wà tà à-fəcak someone REL.NSBJ goat 3SG.POSS 3SG.SBJ-get.lost tà]RC wàtsá, à-ká-xan.

3SG.POSS DEM.PROX 3SG.SBJ-IPFV-cry

'This person whose (his) goat got lost, is crying.'

A gap strategy is used with regards to the object of comparison. In example (21) below, nothing follows the comparative preposition $\dot{\alpha}x\dot{\alpha}$.

⁴ This form is also commonly found in main clauses.

⁵ A leftward repetition of the verb root results in an emphatic or highlighted verb form (Viljoen 2017b: 65–67).

⁶ See Section 4 for examples of non-relativised comparative clauses

- (21) àlà Indá àlà wàtsá рá má at.level REL.SBJ person REL.NSBJ person DEM.PROX dzín **áxà**]RC wàtsá, à-kap táwáx íik^wà. tall DEM.DIST 3SG.SBJ-speak good over like.this 'That person that this person is taller than, speaks well.'
- 3.4 Which grammatical relations can be relativised

In Gavar all the grammatical relations in the accessibility hierarchy (see Fig. 1), may be relativised (see examples (22) to (27) below).

- a) Subject
- (22) Þà tà [mà fàcàk tà gàdák]RC ox 3SG.POSS REL.SBJ get.lost 3SG.POSS far náná tá-gəra-ájá.

 DEM.DIST PFV-find-PTCP

 'That ox of his that got lost far away has been found.'
- b) Direct object
- (23) $k^w \acute{a}$ $sk \grave{a}n$ $t \grave{a}$ $v \acute{e}m \acute{e}$ [$n \acute{d} \acute{a}$ even thing 3SG.POSS what REL.NSBJ $\acute{a} 2^w \partial s \grave{a}$]RC $\grave{a} \emph{d}al$ $t \acute{a} w \acute{a}h$. 3SG.SBJ-cultivate-3SG.DOBJ 3SG.SBJ-do good 'Anything of his that he cultivates (it) does well.'
- c) Indirect object
- (24) wà gí ànà [ndá sá-? vəf-ànà wìrì.]RC children COP REL.NSBJ 1SG.SBJ-heat-3SG.IOBJ sauce 'It is for the children that I heat sauce (for them).'
- d) Oblique

In the corpus, examples of relativised obliques encoding instrument (25a), location (25b) and time were found (25c).

(25)a. \hat{bar} $\hat{b$

'The iron (tool) that we dig the well with (it).'

- b. dʒàk ànà [ndɔ́ wàlà à-ਖad ngàlèlèm hut COP REL.NSBJ woman 3sG.SBJ-sweep gravel á mɔ́n.]RC inside
 'It is the hut that the woman sweeps gravel from (inside).'
- c. $x^w \hat{a} t \hat{a} n dz in \hat{a} \hat{n} \hat{a}$ \hat{a} \hat{a}

e) Genitive

(26)àlà ſndá ràk^wàts tà tá-jab-ájá, RC clothes 3SG.POSS PFV-clean-PCPT REL.NSBJ someone à-ká-nda tà á q^{w} àj q^{w} àjà. 3SG.SBJ-IPFV-go 3SG.POSS LOC festival 'The person whose clothes have been cleaned, is going to the festival.'

f) Object of comparison

(27)kà [ndə nx^wà ànà má dài рá at.level ox REL.NSBJ goat COP REL.SBJ greater áxàlRC wàtsá. à-ká-ſi tà. DEM.PROX 3SG.SBJ-IPFV-run over 3SG.POSS 'This ox that the goat is bigger than, is fleeing'

3.5 Tense/aspect in relative clauses

Verbs in independent clauses in Gavar may be marked with perfective ($t\acute{a}$ -), imperfective ($t\acute{a}$ -), or future ($t\acute{a}$ -) prefixes (Viljoen 2019: 263). Verbs in Gavar are also frequently left unmarked for TAM. Unmarked verbs are used for generic situations or actions and can refer to past events, being used for theme-line, consecutive events in narrative texts (Viljoen 2019: 263–264).

In relative clauses, unmarked (9a), imperfective (15a) and future (28a) verb forms can be found. However, the perfective form is not

permitted (28b). The perfective meaning is covered in relative clauses by the unmarked verb as in example (9a).

- (28)a. màwàl [mà á:-2"ən dʒàk,]RC tà-hà. man REL.SBJ FUT-build house arrive-VNT 'The man who will build the house has arrived.'
- b. *màwàl [mà tá-2**an dʒàk,]RC tà-hà.
 man REL.SBJ PFV-build house arrive-VNT
 'The man who built the house has arrived.'

It is not unusual in Chadic languages for tense/aspect marking within relative clauses to differ in some way from that in independent clauses (Frajzyngier 1996: 454–455). For example, in Giziga (Shay 2021: 301), Mofu-Gudur (Hollingsworth 2004: 43), Cuvok (Dadak 2021: 183) and Sukun (Thomas 2014: 242), past tense marking is not attested in relative clauses but future marking is possible. This is reminiscent of the restriction on perfective marking in Gavar. The special treatment of the perfective in relative clauses can also be seen in West Chadic languages such as Hausa which has two perfective forms, one of which is only found in non-relative contexts, while the other occurs in both relative and non-relative contexts (Zima 1991: 16).

So-called 'relative' verb forms are common in both the West and East branches of Chadic (Zima 1991: 22). Certain Central Chadic languages also, for example Gidar (Frajzyngier 2008: 455–456) and Cuvok (Dadak 2021: 183–184), have special subordinate verb forms which are used in relative clauses. This, however, is not the case for Gavar, which apart from the restriction on the perfective, uses the same verb forms in relative clauses as are found in independent clauses. There is also no distinction in the form of the relative marker with regard to perfective/imperfective aspect in Gavar as may be found in certain other Central Chadic languages such as Giziga (Shay 2021: 300) and Daba (Lienhard & Giger 1976: 15f.).

3.6 Existential status of the head noun

The head noun of Gavar restrictive relative clauses can have either existential status. When its existence has not been previously established, there is no post-relative marker following the relative clause

(29a-b). The head noun may either be non-specific (29a) or specific (29b).

- (29)a. à:-ká-da:-xà àlà [mà srək-ànə 3PL.SBJ-IPFV-bring someone REL.SBJ teach-3SG.IOBJ skən á wəʒí]RC [má ntágwəleŋ.]RC thing LOC children REL.SBJ one 'They bring only one teacher.'
- b. 2"ðlàŋ [ndố sá-ɓam-ð]RC rà-dzánfád panther REL.NSBJ 1SG.SBJ-munch-3SG.DOBJ hand-nine áxà dzánfád.

 over nine

 'The panthers that I ate are ninety-nine.'

When the existential status of the head noun has already been established, a demonstrative follows the relative clause (22 & 30).

(30) sà-tá-waj mà k^wà [ndź 1sG.SBJ-PFV-forget word 2sG.POSS REL.NSBJ x^wá-yal-àkà]RC wàtsà bàzà.

2sG.SBJ-tell-1sG.IOBJ DEM.DIST COMPL

'I have forgotten what (lit that word) you told me

'I have forgotten what (lit. that word) you told me.'

Therefore, we see that Gavar encodes the existential status of the head noun by contrasting the use versus the absence of post-relative markers. This corresponds with Frajzyngier's (1996: 432) observation for some Central Chadic languages, that the only way of indicating the 'definiteness' of the head noun is by adding a post-relative marker. A similar system is found in the nearby language Mina (Frajzyngier & Johnston 2005: 430).

4 Adverbial clauses based on the relative clause structure

In Gavar, there are a number of different types of adverbial clauses which have developed from the relative clause structure. These differ from standard relative clauses in that they do not modify nouns, nor function as arguments in a clause. Rather they have an adverbial function. They all involve the non-subject relative marker $nd\delta$ (or $n\delta$). Some are marked directly with $nd\delta$ (Section 4.1), in other cases

the relative marker is preceded by a preposition (Section 4.2). The marking of adverbial clauses with a relative marker has also been observed in nearby languages such as Daba (Lienhard & Giger 1976: 16), Mofu-Gudur (Hollingsworth 2004: 45) and Buwal (Viljoen 2013: 564–572).

4.1 Adverbial clauses directly marked with ndá

There is some variation in semantic relations that may be expressed by adverbial clauses directly marked with $nd\delta$. The most common, however, is the general temporal relation. One could hypothesise that such temporal adverbial clauses originated from an oblique relative clause involving a temporal noun modified by a relative clause as in example (31a). Over time, the temporal noun is omitted (32b) with the resulting headless relative clause being reanalysed as an adverbial clause.

- (31)a. **yàlà** [ndá xì-g*ab là bàzà,]RC moment REL.NSBJ 1INCL.SBJ-weed field COMPL xì-nda tàk*à á bəl mpì.

 1INCL.SBJ-go 1INCL.POSS INF chop tree 'The moment we finish weeding the field, we go to chop trees.'
- b. $[nd\acute{a} x\grave{i}-g^wa\acute{b} l\grave{a} b\grave{a}z\grave{a},]$ AC $x\grave{i}-nda$ REL.NSBJ 1INCL.SBJ-weed field COMPL 1INCL.SBJ-go $t\grave{a}k^w\grave{a}$ \acute{a} $b\grave{a}l$ $mp\grave{i}.$ 1INCL.POSS INF chop tree

'When we finish weeding the field, we go to chop trees.'

For general temporal adverbial clauses, the exact nature of the temporal relation can be determined by the tense/aspect markers in each clause. In example (32a) the completive marker $b \partial z \dot{a}$ in the first clause indicates that the action expressed by this clause occurred before the action expressed by the second clause. The imperfective prefix $k \dot{a}$ - attached to all the verbs in example (32b) indicates that the actions/situations occurred at the same time.

(32)a. [**ndó** tsáx xì-tsax-xà là bòzà,]AC REL.NSBJ clear 1INCL.SBJ-clear-VNT field COMPL

féŋ hì-fèŋ-xà là bàzà.
burn 1INCL.SBJ-burn-VNT field COMPL
'When we have finished clearing the field, we burn it.'

b. [ndá á-ká-da mà?wàs à dʒàk,]RC
REL.NSBJ 3SG.SBJ-IPFV-be newborn LOC hut
à-ká-gap, à-ká-nda.
3SG.SBJ-IPFV-speak 3SG.SBJ-IPFV-walk
'When he was a newborn in the hut, he was speaking, he was walking.'

Many such temporal clauses also have a cause type meaning, as in examples (33a) and (33b). The verbal aspectual particles $k\acute{a}$ and $\grave{a}k\grave{a}$ in the temporal clause in each example respectively, indicate that the action expressed by the first clause occurs before that of the second. The purposive marker $k\acute{a}$ indicates that an action is being done in advance with a purpose in mind. The immediate marker $\grave{a}k\grave{a}$ indicates that an action has just taken place.

- (33)a. [$nd\delta$ xì-fin- \dot{a} - $z\dot{a}$ $k\acute{a}$,]AC $b\acute{a}w$ REL.NSBJ 1INCL.SBJ-grind-VNT-TRANS PURP change \acute{a} - $b\partial w$ $t\dot{a}$ \acute{a} $nf\acute{a}$ $\grave{a}n\grave{a}$ $ndr\grave{a}$. 3SG.SBJ-change 3SG.POSS LOC flour COP sorghum 'When we grind it, the sorghum turns into flour.'
- h. à-vah á Γná mķà tal REL.NSBJ blacksmith 3SG.SBJ-pass.day INF hammer tà dàvàr àkà dàgàlà,]AC rà tá-ndrim IMM a.lot arm 3SG.POSS PFV-hurt PURP hoe 'When the blacksmith has just spent the whole day hammering hoes, his arm hurt.'

When a clause marked only with $nd\delta$ occurs in the predicate position of a copula clause, preceded by the focus copula $\grave{a}n\grave{a}$, it may express reason (34a) or manner (34b).

(34)a. ſà ànà [ndớ sá-ká-maj-bà 3SG COP REL.SBJ 1INCL.SBJ-IPFV-love-REFL.IOBJ

Kwásmá Rafel áxà Kwásmá Salawme.⁷]AC Kosma Rachel over Kosma Salome 'It is why I love Kosma Rachel more than Kosma Salome.'

b. ſà ànà [ndə násárá à:aí à:-nda-xà 3sg REL.SBJ white.man PL 3PL.SBJ-go-VNT COP á wàtsá. gra-ànì]AC INF find-1EXCL.DOBJ DEM.PROX 'It is how the white men came and found us.'

4.2 Adverbial clauses marked with a preposition plus ndá

Many prepositions in Gavar are complex, being a combination of the basic locative preposition \acute{a} plus another element, often a body part noun (Viljoen 2022: 459). Taking into account their nominal source, it is not surprising that constructions involving such prepositions followed by a relative clause should have developed over time. The nominal part of the complex preposition would have originally functioned as the head noun modified by the relative clause, before being reanalysed as a construction involving a preposition plus a headless relative clause. Such constructions express a number of adverbial meanings, which are listed below with examples.

Note, however, that it seems that the relative pronoun is only present when the adverbial clause is verbal. Non-verbal adverbial clauses are marked directly with the preposition as in examples (35a) and (35b).

- (35)a. á dámá, kwáhwá xàjì 1à á à:-gra fire 3PL.SBJ-see place LOC bush person COMP [**ándzá** tíw kuran àːgí ákàs.]AC ASS.PL electricity PL NEG.EXIST as 'In the bush there is fire for people to be able to see, as there are no things like electricity.'
- b. \grave{a} -gas- $b\grave{a}$ wàlà \acute{a} dzi, 3SG.SBJ-look.for-REFL.IOBJ wife INF take \grave{a} :- $k\acute{a}$ -val- \grave{a} n \grave{a} sk^w á [\acute{a} r \acute{a} màsàgàl 3PL.SBJ-IPFV-give-3SG.DOBJ NEG because laziness

⁷ Tones have not been marked on the French proper nouns in this example.

tà dàj.]AC

3sg.poss too.much

'He looks for a wife to marry, they don't give him one because he is too lazy (lit. his laziness is too much).'

4.2.1 Clauses marked with á dìwzá

Clauses marked with \acute{a} diw \acute{a} 'behind, after', express a relative time meaning, with the event expressed by the main clause occurring after the event in expressed by the adverbial clause (36).

[á dìwzá ndź (36) $xi-q^wab$ 1à bàzà, AC after 1INCL.SBJ-weed field COMPL REL.NSBJ xì-nda tàk^wà á hal mpì. 1INCL.SBJ-go 1INCL.POSS INF chop tree 'After we have finished weeding the field, we go to chop trees.'

It is possible for words signifying time such as $v \dot{a} x$ 'day' to be inserted between $\dot{a} d \dot{u} w z \dot{a}$ 'after' and the non-subject relative marker $n d \dot{a}$ (37).

[á dìwzá vàx ndź $xi-g^wab$ (37)day after REL.NSBJ 1INCL.SBJ-weed field bàzà,]AC xì-nda tàk^wà á bəl mpì. 1INCL.SBJ-go 1INCL.POSS INF chop tree COMPL 'After the day that we have finished weeding the field, we go to chop trees.'

4.2.2 Clauses marked with ándzá

Clauses marked with the preposition *ándzá* 'like, as' express manner (38).

(38)à-ɗal á wàtà màwàl tà [ándzá 3sg.sbj-do loc home husband 3sg.poss ndá á-ká-dal á wàtà bàbà tà.lac REL.NSBJ 3SG.SBJ-IPFV-do LOC home father 3sg.poss 'She does at her husband's home just as she was doing at her father's home.'

4.2.3 Clauses marked with ara

Clauses marked with the preposition *árá* 'to, at (a person), because' express reason (39).

(39) màłíjí nàkà à-ká-tab wàlàf
neighbour 1sg.poss 3sg.sbJ-IPFV-touch blindness
[árá ná ndʒà tà
because REL.NSBJ eye 3sg.poss
à-ká-ndrim-ì.]AC
3sg.sbJ-IPFV-hurt-3sg.dobJ
'My neighbour has difficulty seeing because his eyes hurt him.'

4.2.4 Clauses marked with átá

Clauses marked with the preposition $\acute{a}t\acute{a}$ 'on, about' can refer to a discourse topic (40).

(40) Jà ànà mà ndó sá-ká-yal-ax** 3SG COP word REL.NSBJ 1SG.SBJ-IPFV-tell-2SG.IOBJ
[átá ndó sá-ká-maj K**ásmá.]AC
about REL.NSBJ 1SG.SBJ-IPFV-love Kosma
'These are the reasons that I was telling you about why I love Kosma.'

There was also the following example in the corpus (41) which seems to express the evidence from which one may deduce a fact.

(41) là wár, xì-sən [átá ndá havest.season 1INCL.SBJ-know on REL.NSBJ ndrí á-ká-kpaj.]AC sorghum 3SG.SBJ-IPFV-flower "The harvest season, we know it from the fact that the sorghum is flowering."

4.2.5 Clauses marked with áská

The preposition *áská* 'under, for, so that' marks purpose clauses in Gavar. In the majority of cases a relative marker is not present. However, there are two examples of this preposition in the corpus being followed by the non-subject relative pronoun (41).

(42) sà-tá-kəɗaŋ ra [**áská ná**1SG.SBJ-PFV-finish SIM so.that REL.NSBJ
sá-ká-xaʃaʃaŋ bàzà.]AC
1SG.SBJ-IPFV-forget COMPL
'I finished on the way lest I forget'

5 Comparative clauses

Certain comparative constructions in Gavar are based on the subject relative clause with an adjectival predicate and marked with the subject relative pronoun carrying a high tone $m\acute{a}$. This reflects the parameters under Table 1 as it is seen there that the relative marker carries a high tone when followed by an adjective. The relative marker is usually preceded by the preposition $p\acute{a}$ 'at level' while the object of comparison is preceded by the preposition $\acute{a}x\grave{a}$ 'over' (43).

- (43)a. mpì pá [má dzíŋ áxà ndrì.]RC tree at.level REL.SBJ tall over sorghum 'The tree is taller than the sorghum.'
- b. xàjàk nàkà **pá** [**má** dímdím áxà country 1sG.POSS at.level REL.SBJ cool over ntrà nkrèm.]RC month dry 'My country is cooler than the dry season.'

One example was found where the preposition $p\acute{a}$ was not present. In this case the relative clause was directly preceded by the focus copula $\grave{a}n\grave{a}$ (44).

(44) *K*^wàjàŋ ànà [**má** dèf áxà Làwán.]RC Koyang COP REL.SBJ short over chief 'Koyang is shorter than the chief.'

Superlatives have a similar structure but in this case the object of comparison is not explicitly mentioned as in examples (45a) and (45b). Note that the preposition $\acute{a}x\grave{a}$ is optional. It is present in example (45b), while in (45a) it is missing.

- (45)a. *míndʒá* **pá** [**má** *léx*.]RC DET.INDF.SG at.level REL.SBJ very.thin 'The other one is the thinnest.'
- b. *mbà gàmtàk pá* [*má féŋ áxà*.]RC child chicken at.level REL.SBJ small over 'The chick is the smallest.'

6 Conclusion

Embedded restrictive relative clauses are used extensively in Gavar and exhibit many characteristics common to relative clauses in other languages. Like most other VO languages (Payne 1997: 326; Tallerman 2015: 278), and many other Chadic languages, the Gavar relative clause follows its head noun which is external to it. The relative clause is marked by a relative marker at the beginning of the clause. Gavar, in common to several nearby Central Chadic languages, has two distinct relative markers; one for the subject role and one that covers all non-subject roles. It is interesting to note that the tone on the subject relative marker ma is variable, while the tone on the non-subject relative marker ndá (ná) is stable. Such tonal variation is not frequently reported for other Chadic languages in the area. The distinction of subject and non-subject carries over into how the NP₋₁ is expressed within a relative clause. The gap strategy is used for subjects with regard to subject agreement marking on the verb, while resumptive strategy is most common for non-subjects. This is a common pattern cross-linguistically. Unlike many of the world's languages, Gavar is able to relativise all grammatical functions found in the hierarchy of grammatical relations: subjects, direct objects, indirect objects, obliques, genitives and objects of comparison.

Gavar does not make use of the 'relative tenses' that are commonly found in the West and East branches of Chadic. There is, however, a restriction on perfective marking in relative clauses which corresponds with similar restrictions observed in nearby languages. The existential status of the head noun is coded by the absence versus the presence of a post-relative demonstrative, a strategy frequently seen in Chadic languages (Frajzyngier 1996: 431–433).

As in many languages, other complex constructions in Gavar such as adverbial clauses and comparatives have developed over time from relative clause constructions. Adverbial clauses involve the use of the non-subject relative marker. This is not surprising as they most likely have developed from oblique relative clauses. The relative marker may mark the adverbial clause alone in which case the most common meaning is a general temporal one whose interpretation depends of the tense/aspect marking of the verbs. The relative pronoun may also be preceded by a number of different prepositions yielding more specific semantic relations such as: temporality, manner, reason, discourse topic and even purpose clauses. Comparatives (and superlatives), on the other hand, are based on subject relative clauses with an adjectival predicate.

Further research needs to be done into the possibility of non-restrictive as well as adjoined relative clauses. Also reduced relative clauses (Andrews 2007: 232–233) involving such participle forms as *dzawájá* 'tied up' in example (46) below, warrant investigation.

(46) $nx^w \grave{a}$ $m\grave{a}$ $dzaw-\acute{a}j\acute{a}$, $t\acute{a}$ - mta^{4} $t\grave{a}$. goat REL.SBJ attach-PTCP PFV-break 3SPOSS 'The goat that was tied up, broke away.'

Abbreviations

first person	LOC	locative
second person	NMLZ	nominaliser
third person	NEG	negation
adverbial clause	NP	noun phrase
action	NPREL	relativised noun phrase
associative	NSBJ	non-subject
complementiser	PAT	patient
completive	PCPT	participle
copula	PFV	perfective
demonstrative	PL	plural
determiner	POSS	possessive
distal	PROX	proximal
direct object	PURP	purposive
exclusive	RC	relative clause
	second person third person adverbial clause action associative complementiser completive copula demonstrative determiner distal direct object	second person NMLZ third person NEG adverbial clause NP action NPREL associative NSBJ complementiser PAT completive PCPT copula PFV demonstrative PL determiner POSS distal PROX direct object PURP

EXIST	existential	REFL	reflexive
HN	head noun	REL	relative pronoun
ICP	intransitive copy pronoun	SBJ	subject
IMM	immediate	SG	singular
INCL	inclusive	sv(o)	subject, verb, (object)
INDF	indefinite	TAM	tense, aspect, mode
INF	infinitive	TRANS	transitivity marker
IOBJ	indirect object	VNT	ventive
IPFV	imperfective aspect	VO	verb-object

References

- Andrews, Avery D. 2007. Relative Clauses. In Timothy Shopen (ed.), *Language typology and syntactic description: Complex constructions*, vol. 2. 2nd edn. Cambridge: Cambridge University Press. 206–236. https://doi.org/10.1017/cbo9780511619434.004
- Dadak, Ndokobai. 2021. *Grammaire cuvok: langue tchadique centrale du Cameroun*. Amsterdam: LOT.
- Eberhard, David M., Gary F. Simons & Charles D. Fennig (eds.). 2024. Gavar. *Ethnologue: Languages of the World.* Dallas: SIL International. http://www.ethnologue.com.
- Frajzyngier, Zygmunt. 1996. *Grammaticalization of the complex sentence:* A case study in Chadic. (Studies in Language Companion Series 32). Amsterdam: John Benjamins Publishing Company. https://doi.org/10.1353/lan.1998.0251
- Frajzyngier, Zygmunt. 2008. A grammar of Gidar. Frankfurt: Peter Lang.
- Frajzyngier, Zygmunt & Eric Johnston. 2005. *A grammar of Mina*. Berlin: Mouton de Gruyter. https://doi.org/10.1515/9783110893908
- Gravina, Richard. 2014. *The phonology of Proto-Central Chadic*. Utrecht: LOT. Greenberg, Joseph. 1966. *The languages of Africa*. Bloomington: Indiana University.
- Hollingsworth, Kenneth. 2004. *A survey of clause types in Mofu-Gudur*. Yaounde: SIL Cameroon. https://www.silcam.org/resources/archives/47713
- Keenan, Edward L. & Bernard Comrie. 1977. Noun phrase accessibility and universal grammar. *Linguistic Inquiry* 8(1). 63–99. https://www.jstor.org/stable/4177973.

- Lienhard, Ruth & Marti Giger. 1976. *Daba grammar phrase level sorting work paper*. Yaounde: SIL Cameroon. https://www.silcam.org/resources/archives/47477
- Noukeu, Serge. 2004. *Etude phonologique du Gavar*. Yaounde: University of Yaoundé I Maitrise.
- Payne, Thomas. 1997. *Describing morphosyntax. A guide for field linguists*. Cambridge: Cambridge University Press. https://doi.org/10.1017/cbo978 0511805066.012
- Schuh, Russel G. 1998. *A grammar of Miya*. Berkeley & Los Angelos: University of California Publishing.
- Shay, Erin. 2021. *A grammar of Giziga*. Leiden: BRILL. https://doi.org/10. 1163/9789004445970
- Tallerman, Maggie. 2015. *Understanding syntax*. 4th edn. London: Routledge. https://doi.org/10.4324/9781315758084
- Tchikoua, Paul. 2006. *Morphologie nominale du Gavar*. Yaounde: Yaoundé I Maitrise en Linguistique Générale.
- Thomas, Michael F. 2014. *A grammar of Sakun (Sukur)*. Boulder: University of Colorado.
- Thompson, Sandra, Robert Longacre & Shin Ja Hwang. 2007. Adverbial Clauses. In Timothy Shopen (ed.), *Language typology and syntactic description*, vol. 2. 2nd edn. Cambridge: Cambridge University Press. 237–300. https://doi.org/10.1017/cbo9780511619434.005
- Trask, Robert Lawrence. 1993. *A dictionary of grammatical terms in linguistics*. London: Routledge. https://doi.org/10.4324/9780203393369
- Viljoen, Melanie. 2013. *A grammatical description of the Buwal language*. Bundoora: La Trobe University. http://arrow.latrobe.edu.au:8080/vital/access/manager/Repository/latrobe:37216.
- Viljoen, Melanie. 2017a. A comparison of the structural and functional properties of the optional copula in Buwal and Gavar. In Shigeki Kaji (ed.), *Proceedings of the 8th World Congress of African Linguistics, Kyoto 2015*. Kyoto: Research Institute for Languages and Cultures of Asia and Africa, Tokyo University of Foreign Studies. 149–168.
- Viljoen, Melanie. 2017b. *Gavar verb phrase*. Yaounde: SIL Cameroon. https://cameroon.sil.org/resources/archives/78579.
- Viljoen, Melanie. 2019. Gavar verb morphology. In Henry Tourneux & Yvonne Treis (eds.), *Topics in Chadic linguistics X: Papers from the 9th Biennial International Colloquium on the Chadic Languages, Villejuif, September 7–8, 2017.* (Chadic Linguistics / Linguistique Tchadique / Tschadistik 11). 257–274.

- Viljoen, Melanie. 2022. Varying functions of the comitative preposition ábè in Gavar. *Language Typology and Universals* 75(3). 449–495. https://doi.org/10.1515/stuf-2022-1059.
- Zima, Petr. 1991. Le problème des formes verbales dites 'relatives' en tchadique. In Herrmann Jungraithmayr & Henry Tourneux (eds.), *Études tchadiques: la phrase complexe.* (Études Tchadiques). Paris: Groupe d'études tchadiques. 15–26.